

# **Oregon Department of Education**

Strategic Technology Plan for 2001-2003

Version 3.0

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## 1.0 Strategic Planning Assumptions

#### 1.1. Purpose

To review the Oregon Department of Education (ODE) internal technology division (ODE IT) goals; to translate these goals into technology goals; to describe ODE challenges and potential technology solutions; provide documentation for ODE technology requirements and slated projects; and to inform management and decision-makers of new technologies and how they can support the department's objectives.

#### 1.2. Introduction

ODE's charter is diverse. It stems from the Oregon Constitution, Oregon and federal law, the needs of the schools and school districts, the needs of teachers, students and others in the educational community, the role that the Department has assumed or has been asked to assume by others over time, and from the ever-expanding value attached to near real-time data.

ODE's IT infrastructure performs two roles: First, it provides those functions normally associated with an agency in support of the agency's business objectives; secondly it provides those involved in the business of K-12 education with a comprehensive, statewide data repository and communications network. Virtually all stakeholders expect ever-increasing and integrated functionality.

Faster, higher-quality answers to complex questions about education funding, student performance, school performance, and the like, has promoted a shift from a "Reporting" focus to one of "Accountability." The value of near real-time data has also fueled the fire of business reengineering. Data and business function are becoming one.

Fortunately, ODE has a comprehensive strategic vision for this statewide data repository and communications network. ODE intends to develop and maintain a statewide data repository and communications network for the educational community in Oregon. ODE has already established a substantial portion of the statewide educational IT data repository and communications network.

#### 1.3 ODE's Mission

In relentless pursuit of each student's success:

- Use best practices and cutting-edge research to guide our work.
- Partner fully with others in the education community.
- Help Oregon Schools and the Department of Education continue to be great places to work and learn.

## 2.0 Enterprise Overview

## 2.1 Driven by Accountability

The emerging role of the Department at the beginning of the 1990's was driven by accountability. For example, the legislature passed HB 3636 during the 1997 Legislative Session. The bill directed the Department of Education to update the K-12 school budget and accounting system to produce comparable spending information for schools and districts. Data gathered from the system was to be placed in a database accessible to the public.

ODE was faced with many challenges to overcome prior to fulfilling the mission of HB 3636. Two hundred school districts used at least twenty different computerized accounting systems on many different hardware platforms and many small districts kept financial records in Excel or other spreadsheet software. Compounding the multi-platform data source problem was the fact that Oregon had no standard chart-of-accounts for school districts; each district had their own way of categorizing revenues and expenditures. Collection of student performance measures and other non-financial information was also extremely inefficient with most of them done with paper forms and reports.

In response to this, "call to accountability", ODE created the Database Initiative (DBI) project team which focused on addressing the financial management., business process and technical issues. With the successful completion of Phase 2 of the DBI project in September of 2000, the following capabilities are now in place:

- Statewide Chart of Accounts
- Database Development
- Collection Mechanism
- Business Process Reengineering
- Data Reporting and Analysis
- Report Card/Data Collection Augmentation

#### 2.2. Functional Role

Below is a sampling of the changes that have had a significant and compounding impact on ODE's functional role and it's IT infrastructure over time:

- Oregon Educational Act for the 21<sup>st</sup> Century;
- Certificate of Initial Mastery (CIM) / Certificate of Advanced Mastery (CAM) 1991 & 1993:
- Property Tax Reform Ballot Measure 5, 1991-1992 / Ballot Measure 50, 1997-1998;

- ➤ Technology Enhanced Student Assessment (TESA) 2000 2001;
- ➤ House Bill 3636 requiring a uniform budget and accounting system for school districts and education service districts 1997; and,
- A constant and unremitting pattern of change (state law, federal law, programmatic requirements, etc.) requiring substantive modification to ODE's IT infrastructure and functionality.

### 2.2. Legislative Mandates

Below is a brief description of legislation from the 2001-03 session and the information technology impact it has had on ODE. This is exemplary of the biennial legislation that results in an impact on both business processes and information technology for ODE. The agency must respond to all of these mandates as a further call to accountability for its customers and stakeholders.

- ➤ SB 14—Requires, subject to availability of funding, seismic surveys of public buildings. [Affects data collection, storage, and reporting systems]
- ➤ SB 253—Requires the Department of Education to recover certain special education costs from the State School Fund. Previously, resources flowed from the State School Fund to school districts, and the Department would bill the districts. The new law eliminates that step. [Affects State School Funding (SSF) calculations]
- SB 260—Creates a new funding distribution formula for Education Service Districts (ESDs) based on the level of funding of each ESD's component school districts. [Affects formula calculations]
- ➤ SB 262—Allows the state Board of Education to adopt rules for use of electronic student records. [Requires data collection, transfer, storage, and analysis]
- SB 264—Directs the Department of Revenue to bill resident school districts for children who receive special education services through regional programs. [Requires data collection, storage, and analysis]
- ➤ SB 519—Creates grant program for small school districts with small high schools and appropriates \$9 million for grants in the 2001-03 biennium. Requires Department of Education to study the relationship between the size of Oregon's small school districts and the cost and need for programs. Also requires study of the costs of providing services to Oregon students with disabilities. [Requires data collection, storage, manipulation, and evaluation]
- ➤ SB 811—Requires additional information be added to district and school performance reports. [Requires data collection, storage, and analysis]
- ➤ HB 2022—Allows school districts, ESDs, community colleges, and other municipal corporations to prepare biennial budgets. [Affects data validation, storage, and reporting systems]

- ➤ HB 2112—Creates uniform procedures for electronic transactions by school districts, ESDs, community colleges, and other public agencies. [Affects data transfer and electronic transaction systems]
- ➤ HB 2295—Establishes in statute the 11-member Quality Education Commission to determine the level of funding needed for K-12 schools to meet the states education goals. [Requires data collection, storage, and analysis]
- ➤ HB 2298—Creates the School Improvement Fund for grants to school districts related to improving student achievement in the areas of early-grade reading and math. [Affects SSF formula calculations]
- ➤ HB 2300—Appropriates state resources for local option equalization grants for low property-wealth school districts that levy local option taxes for schools. [Requires data collection, storage, and analysis]
- ➤ HB 3374—Allows public bodies to receive and accept communications or transactions electronically. [Affects data transfer and electronic transaction systems]
- ➤ HB 3619—funds programs for students in detention facilities directly through state rather than through billing of the students' resident school districts. [Requires data collection, storage, and analysis]
- ➤ HB 3839—Creates an exemption from public records law any information obtained or used by a public body to authorize, originate, receive, or authenticate a transfer of funds. [Affects data storage and reporting systems].

# 3.0. Division Goals/Principles

#### 3.1. Historical

Historically ODE has been organized through divisions and along program and functional lines. Although each division performs relatively similar job tasks they do so independently of one another. Some of the results are as follows:

- Disparate applications and databases
- Few standards
- Information silos
- Many intra-agency data requests
- Poor training and technical support
- Nonstandard development environment
- Reliance on contracted IT support

#### 3.2. Future

In the future ODE plans to overcome these problems by breaking traditional barriers and entering the era of web-based business as a cohesive unit. In the current government environment to plan one's business strategy is to plan one's IT strategy. This entire process must first be viewed in light of certain global principles. These are:

- Strive to work within the existing model; and optimize process capabilities, i.e. don't create a new process if one already exists which can be modified or enhanced;
- Establish a single data conduit into ODE;
- Identify integration opportunities and fit them within the existing model;
- Use web-based operations;
- Create an intranet;
- Adopt technical tool standards;
- Store data centrally;
- Minimize data redundancy;
- Provide access to most data for users;
- Implement internal security at the minimum appropriate level;
- Intra-agency data requests will be minimized through better access of data; and,
- Provide high quality training and support.

## 3.3. ODE Division Goals

- Support Oregon's 21st Century Schools, Goals 2000 and School -to-Work initiatives.
- Improve and expand two-way data and communication capabilities with local school districts, education service districts, community colleges, parents, teachers, administrators, state legislature, Governor, and all concerned citizens, and the public.
- Assist education service districts and local educational agencies (schools) to connect all schools to the Internet.

#### 3.4. ODE IT Goals

These goals are the guiding force for ODE IT as initiatives or projects are recommended, developed, and implemented. They are as follows:

- Initiate infrastructure improvements in personnel, software and hardware.
- Shift emphasis from paper-based communications and publishing to electronic based.
- Establish a corporate data concept and a single physical repository within the department.
- > Provide effective information for decision-making and accountability.
- Streamline data collection.
- Reduce redundancy/improve data accuracy/timeliness of data from and to ODF
- Coordinate and reduce data collection demands on school districts and educational service districts.
- Improve accuracy and timeliness of data exchange and communication with local school districts, education service districts, community colleges, parents, teachers, administrators, state legislature, Governor, and all concerned citizens, and the public.
- Improve desktop and technical support for internal customers.

#### 3.4. ODE IT Division Principles

- > Be as innovative as possible
- Embrace change
- Standardize processes and systems to address common functions and better serve customers
- Develop and obtain applications and create an IT environment resilient to rapid and diverse change
- Concentrate on technology geared toward improving efficiency such as integration and workflow technologies.

### 4.0 ODE IT Overview

## 4.1. Decision Making

ODE Directors review and approve all major Information Technology initiatives. After review and approval by the Directors, initiatives are sent to the ODE Cabinet, composed of Associate Superintendents, the Deputy Superintendent, Directors of Technology and Communication, and the Superintendent of Education, for final review and approval. The Director of TIRM ensures that adequate resources are available for Enterprise projects and has final sign off authority on all IT projects.

The Directors IT Committee's purpose is to make sure that the allocation of information resources reflects the department's program priorities. The Committee also ensures that the department's information resource management plan is consistent with the agency mission and with the state Enterprise Information Technology Strategy. The Department has included DAS on the steering and subcommittees of major projects such as the DBI, Enterprise, Nutrition, DIA and TESA projects.

#### The Committee's role is to:

- Meet regularly to oversee information technology activities, provide direction, approve policies and procedures and prioritize automated information resource allocations.
- Advise program divisions of standards for acquisition and cost effective use of hardware and software.
- Provide a forum for open and objective sharing of information as a basis for the most effective decisions in the interest of the department's mission and objectives.
- ➤ Be knowledgeable of current automated information resource technology and the potential business applications for the technology.
- Assure the department's information resources fit together as part of a statewide system.
- Oversee the department's Internet and Intranet activities.
- Identify the department's web goals, set standards for web development, identify best practices, and assure accessibility to content.

### 4.2. Standards

The software industry is moving towards widespread adoption of international standards for application integration. Consumers demand greater reuse from their data and interoperability between vendor applications. In order to achieve these goals, software must be made to understand a common set of data encodings and protocols. Vendors are pursuing many technologies to deliver

better functionality and data reuse to their customers. These standards should promote functional interoperability between applications with built-in flexibility to use different tools and mechanisms. Furthermore, since this application integration technology is very new, many standards are still being defined; we cannot yet totally commit ourselves to a single standard.

There are important differences between standards and brand names. Standards support efficiency and interoperability, while preserving flexibility and functionality. Brand names support interoperability within a work unit or other closed system, but don't necessarily support business process efficiency, flexibility, or functionality.

There are two guiding principles for ODE when making decisions regarding software acquisitions. The first is cost. The department receives an Educational discount on all Microsoft products. (For example, the cost for Microsoft's Professional Office Suite is \$46 per seat). The same discount applies for all Microsoft products. The Department takes advantage of these cost savings whenever possible and prudent.

The second guiding principle is functionality. ODE believes that Microsoft is going to be an existing platform for many years. These products work together seamlessly, and they have a large market share which means the department can interact easily with other agencies. ODE attempts to roll-out new operating sytems and applications in a delayed and deliberate fashion staying at least one release behind the market. This avoids getting too far out of step with the current product while ensuring the product is mature and sufficiently debugged prior to its use.

The published policy at ODE is based on Total Cost of Ownership principles. The department has a list of supported software, unsupported but approved software, and software that is not approved. Supported software includes the Microsoft line of products such as Office Suite and a limited number of other products. Unsupported software are applications such as SASS, which are special software needs required for RA's to do their job. Software that is not approved cannot and will not be installed.

ODE has worked diligently to standardize their databases to the SQL platform. The department no longer uses Alpha V and Filemaker Pro. The department plans to convert all Access MDBs to SQL and use Access as the front end. This will ensure that all of ODE's applications operate properly. It will also provide increased speed and more efficient back-up for the applications. As part of its enterprise integration strategy, the department plans to convert the OPTE FoxPro application to SQL.

## 4.3. Strategic Partnerships

It is critical that the Department strengthen key relationships with District and ESD partners as the enterprise grows and matures. The Department meets both monthly and quarterly with IT leadership in the field. IT managers and District staff are invited to participate at every level of decision making from focus groups, to advisory committees, to Steering Committees. The Department delivers ongoing regularly scheduled training and publishes newsletters at least monthly about pertinent IT topics. Help service and materials are available both on-line and by telephone for all major systems. Additionally, the following are important strategic partnerships that must be maintained:

- OPEN Internet connectivity project.
- Relationships with school districts and educational service districts.
- Relationship with District IT Managers.

## 5.0 Technology Overview

### 5.1. ODE Technology Assumptions

The following are assumptions for ODE:

- Ties to OPEN Internet Connectivity project will remain strong
- Relationships with school districts and educational service districts will be maintained and enhanced
- > Relationship with District IT Managers will be maintained and enhanced.
- WEB-based technology will be utilized in lieu of a private network for the department
- ➤ The Database Initiative project provides an excellent vehicle to align multiple department data efforts towards a single focused result.
- SB622 will provide necessary web and video telecommunications connectivity to districts.
- Changes to federal and state law / policy have largely driven IT development at ODE
- The value of data resources has risen exponentially as a result of access to near real-time data and the business process to manipulate them

## 5.2. Technology Opportunities

New opportunities exist to reduce costs and improve the speed, accuracy, and efficiency of services by using the Internet. ODE intends to make every effort to take advantage of tools that make access to services and information easier by:

- Increasing service to school districts, educational service districts and the public by creating a tightly integrated infrastructure in support of Technology and Information Resource Management (TIRM).
- Improving on-line access to information to support department's decisionmaking.
- Developing an interactive Web interface to allow department customers to provide focused input on services.
- Supporting large data repositories and expanding search capabilities and access for both internal and external customers.
- Using automation to improve productivity.

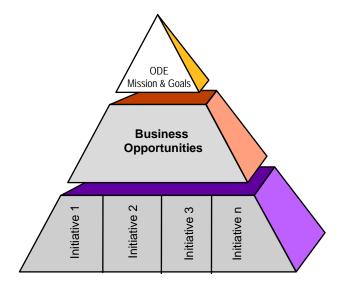
## 5.3. Technology Vision

In late 1999 and early 2000, the department developed an Information Technology Strategic Plan. The revised Plan addresses the alignment of technology initiatives with the department's goals and objectives.

The department's IT plans for improvement over the next 3-5 years are consistent with ODE's established Mission and Goals. The following "Strategic Planning Pyramid" was used to guide the planning process.

Exhibit II-1

Strategic Planning Pyramid



This pyramid provided a conceptual basis for documenting how high-level mission and goals statements flow and support specific departmental technology initiatives. This structure provides: a) an important cross-validation that departmental technology initiatives are truly consistent with overall departmental business direction, and b) a way to evaluate future departmental technology initiatives. (See **Appendix A** for ODE's **Technology Vision Diagram**)

## 6.0 IT Department Description

#### 6.1. Current Environment

ODE's IT department is designed to perform a myriad of tasks including, but not limited to:

- Providing IT network and desktop services throughout the Department of Education and other occupants of the Public Services Building (on the Capitol Mall), the Vick Building (downtown Salem), the Oregon School for the Deaf, and the Oregon School for the Blind.
- Providing a repository for much of the data used to: finance schools in Oregon; assess the performance of students, schools and districts; support many of the programs required by law; and finally, to provide requisite functionality within Oregon's educational community including schools, school districts, educational service districts (ESD's), educational data centers, and other entities.
- Providing the data sharing framework to facilitate and ensure the effective use of data resources;
- Providing a multifaceted, web-based communications and data transfer capability to more efficiently conduct the business of education.
- Standardizing data protocols to streamline data transfer, storage and usage;
- Providing the systems, processes and procedures to "clean" and validate incoming data via automated processes;
- Designing, constructing, and testing systems for use by ODE, the statewide educational community, or both;
- Planning the evolution of the statewide education IT networks and data repositories; and
- Solving unanswered IT related problems posed by shifting educational infrastructure requirements.

## 6.2. Support Infrastructure

ODE's IT department provides the support infrastructure for the following systems and programs:

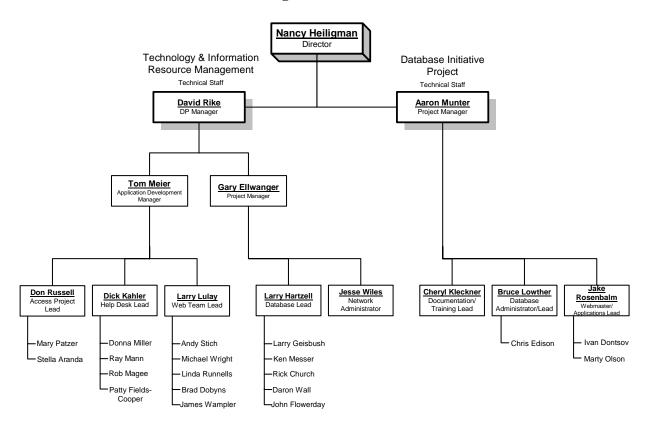
- Database Initiative Project
- Pre-Kindergarten study data collection
- Web access and application dev. & imp. Internet / Intranet / Extranet development and support
- Web reporting of financial data, student information, etc.
- Oregon Student Record
- Special Education Child Census (SECC) on the Web
- Nutrition System
- Enterprise Integrations
- Forms control and data dictionary
- Technology Enhanced Student Assessment (TESA) (This has not been fully implemented and my be discontinued)
- Internal Database Management
- Desktop publishing
- Report Card initiative
- Data Consolidation
- Data Integrity Assurance (this has not been implemented and may be discontinued)
- Special Schools
- School Finance Database
- Special Schools (Infrastructure)
- Oregon Public Education Network (OPEN)
- Oregon Statewide Assessment
- Certificate of Initial Mastery (CIM) / Certificate of Advanced Mastery (CAM)
- Off-Grade Assessment Tests
- Integrated Performance Benchmarking System
- Distance Education (SB 622 and Erate)
- Technology Planning (for teachers use in the classroom)
- Training and User Support
- Network Improvement, Management and Support

- Operations and Maintenance
- Auditing, Standards, and Procedures
- Disaster Recovery
- The Access Database Project that supports the following programs: Pupil Transportation; Special Education; Tracking; Forms Database; Personnel Management Database; Personnel Database; Time Keeping; Out-of-state and in-state travel; Generic Grants Management (SPED and OPTE); Contracts Management; Alternative Education; Project Monitoring; PCS/Vets; Budget Projection; and, State Financial Management System (SFMS) Reporting.

See **Appendix B** for a comprehensive matrix that defines the interconnectivity of all of the previously listed ODE IT initiatives with the business processes they support.

See **Appendix C** for a comprehensive matrix that links the ODE IT initiatives with the current technology architecture.

# 6.3. Technology Information Resource Management Organization Chart TIRM Organization Chart



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#### 6.3. Technical Environment

ODE's current uniquely constructed IT department includes the following functional categories:

- IT Management (4 FTE);
- Network Administration (1 FTE);
- Agency related applications (Access 3 FTE);
- Statewide educational community related applications (Web Applications and Maintenance 8 FTE);
- Databases (Administration, 2 FTE; Database and Applications Maintenance, 7 FTE);
- User Support (1 FTE); and,
- ➤ Help Desk (5 FTE).

ODE has hardware, software and network assets in four physical locations. These assets include:

- > Servers (33)
- Applications (66) (Access and SQL Server)
- Network (990) (including Oregon School for the Blind (OSB) 240 and Oregon School for the Deaf (OSD) 120)
- Networked PC's (850 including OSD 128 PC's and iMacs and OSB 70 PC's)

#### 6.4. Asset Management

ODE maintains an automated asset management system to track all computer equipment. The existing inventory is summarized in the previous technical environment.

## 6.5. Information and Data Sharing

The department values the sharing of data and recognizes the efficiencies obtained by partnering with school and education district. The department publishes information on the Internet in accordance with recently enacted legislation (HB 3389).

## 7.0 Initiatives and Projects 2001-2003

## 7.1. Initiatives Descriptions

Major initiatives and their 2001-2003 objectives are summarized below (see Appendix A for additional detail).

- Database Initiative Project Phase 2: Implement the Pilot statewide.
  COMPLETED
- ➤ Database Initiative Project Enhancements: Improve the DBI automated data collection and reporting system to support additional data collection, refine the accuracy and timeliness of reporting, and facilitate system operation and maintenance.
- Pre-Kindergarten Study Data Collection: Design, develop, and implement a relational database to compile data regarding the outcomes for children who participate in Oregon Head Start pre-kindergarten. The State legislature has requested information and research in the following areas:
  - ➤ The impact of Oregon pre-kindergarten (OPK) on the primary school readiness of the children who participate,
  - ➤ The quality of the state's Head Start program,
  - The relationship of program quality, child outcomes and school readiness, and
  - > The relationship between program dollars and successful outcomes.

- Computer-Based Training: Improve the introductory and ongoing application skill level of department staff in the Microsoft Suite and other departmentapproved applications. Improve the technical ability of TIRM staff.
- Network Improvements: Reduce drop outs; improve throughput and speed; eliminate the 10 megabit hubs & equipment. Improve reliability; install mall TV & Boardroom on the desktop and Internet; enable telecommuting; at-home training; and Internet access to ODE's network.
- Help Desk Requests and Desktop Enhancements: Reduce the amount of downtime for staff. Provide serviceable equipment that is conducive to the highest levels of productivity. Improve web integration. Increase security and stability.
- Web: Make data available to districts and to ODE. Reduce phone calls. Increase web page hits. Add the ability to search contents of a PDF file. Upgrade all current NT4 servers to New Version. Keep existing web servers up 24/7. Enable the DBI pages to look like the rest of the department's pages, and enhance search capabilities. Allow all users of ODE websites to

- login in one centrally located screen that identifies all ODE applications that the user can access. Permit ODE to track the usage, browser type, and other pertinent website traffic information.
- Internet: Make data available to districts and ODE. Provide Intranet tools for more efficient ODE internal operations resulting in better service to schools and districts.
- ➤ Intranet: Provide framework to enhance internal communications and support among individual program offices.
- Access Database Project: Ensure that projects are delivered on time and on budget as needed. Projects are fully integrated with other TIRM projects.
- Oregon Student Record: Eliminate paper reports; speed up record transfer; provide standardization of courses; implement a unified means of communicating and reporting.
- SECC on the Web: Automate data collection; get out of the runtime business.
  Completed
- Nutrition System: Replace the Wang System. Collect sponsor data and process claims. Completed
- ➤ Enterprise Integration Database Phase 1: Integrate separate student databases into a single database. **Completed**
- ➤ Enterprise Integration Database Phase 2: Integrate the various department data stores into the enterprise and automate the interface to DBI. This will result in more accurate and timely data, better data accessibility, and improved tools for accountability.
- Forms Control and Data Dictionary: Catalogue all forms and define them; create an operational data dictionary; publish a forms calendar.
- ➤ Network Support: Have services available 99.9% of the time.
- ➤ Technology Enhanced Student Assessment (TESA) and Internal DB Maintenance: Create a TESA pilot test center proof of concept by November 2000. Make student Pre-code files available to CRUD by districts. Make assessment data maintainable and accessible to other department databases. Assessment scores available to districts on-demand for viewing and downloading into their DB. Manage ongoing operations.
- Technology Enhanced Student Assessment (TESA) Roll Out: Manage ongoing operations.
- Desktop Publishing: Publish a timely and accurate school directory.
- Operations and Maintenance (S&S): Maintain optimal network and desktop operations.
- Auditing, Standards, and Procedures: Ensure that TIRM complies with applicable Secretary of State audit standards and IT business practices. Bulletins kept current with department policy.

- Report Card: Produce an accurate and timely report card that has value to the schools and the department.
- Data Collection: Information resource management (IRM). A concept advocating that information be treated as a corporate resource. Consolidate data collection and analysis among various offices in the department.
- Data Integrity Assurance: School districts statewide will realize substantial savings over time if computer services are moved into consolidated service centers. The quality of school data systems will improve if ODE establishes a process to certify computer systems to higher standards and provides funding to support system upgrades. School districts must upgrade their systems to meet the increasing need for accurate, detailed reporting and school-level accountability.
- Special Schools: Bring special schools up to a par with the department as a whole. Improved communications and accessibility to ODE resources for Oregon School for the Blind (OSB) and Oregon School for the Deaf (OSD).
- Finance Database: Document the business rules for processing the allocation of the State School Fund. Determine the requirements, design, construct, test, and implement the database. Integrate collection of related DBI data with the State School Fund database. Produce reports for ODE, school districts, and the legislature.
- Off-grade Assessment Tests: Incorporate off-grade results into the Enterprise Database SMF.
- ➤ Integrated Performance Benchmarking System: Reduce federal reporting by ODE. Produce more relevant program data for national and state use.
- Distance Education (SB 622 and E-rate): Coordinate, manage, train and support what will become the state's largest video conferencing network. Maximize E-rate eligibility for schools.
- ➤ Technology Plan: The plan should be one that educators can use in their classrooms to improve teaching and learning.

## 7.2. Significant Information Technology Projects for 2001-2003

The following are the major IT projects for this biennium:

- Disaster Recovery
  - Plan creation and implementation
- Audits and Standards (CoBit Planning)
  - Staff ongoing function. Create, Implement and Monitor standards and procedures

- Security
- Staff ongoing function. Create, Implement and Monitor Security standards and procedures
- Finance Database
  - Development and Implementation
- Technology Enhanced Student Assessment (TESA) System
  - Begin roll out. Complete Secure Student ID Phase.
- Data Integrity Assurance (See Appendix F)
  - Project to improve Data Quality through consolidation

### 7.3. Future Opportunities

In the last two decades there has been a dramatic shift in the role and volume of data, its acquisition and communication, the means to quickly analyze related or comparative data sets, and the high value placed on the near real-time production of answers to complicated, interwoven problems. Often, having the availability of near real-time data has driven business-reengineering initiatives to incorporate that data. This is the case with the Department of Education's IT department.

ODE's IT department has, of necessity, a constantly shifting focus. In addition to the programs already listed, there are plans in development to bring the Migrant Education Program, the Professional Technical Education Program, and the Federal Grant Management Program into the consolidated, statewide IT environment.

New opportunities exist to reduce costs and improve the speed, accuracy, and efficiency of services by using the Internet. ODE intends to make every effort to take advantage of tools that make access to services and information easier by:

- Increasing service to school districts, educational service districts and the public by creating a tightly integrated infrastructure in support of Technology and Information Resource Management (TIRM).
- Improving on-line access to information in support of the department's decision-making.
- Developing an interactive Web interface to allow department customers to provide focused input on services.
- Supporting large data repositories and expand search capabilities and access for both internal and external customers.
- Using automation to improve productivity.

### 7.4. ODE IT Project Objectives

Objectives are specific milestones and target levels of near-term outputs that are to be achieved during strategic implementation. Each objective should relate to a particular goal. As a rule, most objectives should meet the following criteria:

- Results Oriented Reflect the accomplishments to be achieved. They must be specific enough to provide a clear direction and be understood by the internal implementers and external customers.
- Measurable Objectives must be either quantifiable ("The percentage of Task A completed on time will be increased from 65 percent to 80 percent") or must be able to monitor its success in achieving each objective.
- Aggressive, but attainable Objectives must be challenging, while at the same time attainable. Realism must be imposed in deciding targets.
- Results-oriented Objectives must focus on desired outputs and outcomes, not on the methods used to achieve the target.
- <u>Time-bound</u> Because objectives serve as milestones for monitoring progress toward a goal, it is imperative that accomplishment be achieved within a specific timeframe. The chosen timeframe should be reasonable, yet aggressive.

## 7.5. Project Critical Success Factors

- > Reasonable and predictable costs
- Control of project resources and timelines
- Effective implementation and support
- Scalability to enterprise needs
- > Interoperability with other systems
- Web-centric or web-enabled processes
- Reusable for similar purposes
- > Rapid development and deployment
- Constraints
- Expenditure authorities
- Limitations limit of cash
- Competing fee structure-drive costs of services up
- Slow reaction time and procurement time
- Public access to systems integral components (security, resources of system, user support resources not available)

## 8.0 Application Development Project Planning Process

The Application Development Planning Process at ODE is intended to provide a set of guidelines for the successful completion of application system development projects. The seven phases of the Systems Development Life Cycle (SDLC) are:

Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7
Planning	Definition	Analysis	Design	Build	User	Implementation
					Acceptance	and Evaluation

These phases are a general project outline. Depending upon the specific needs of a project, the project phases may vary. Some of these phases may be performed simultaneously in smaller projects.

## 8.1. Phase 1 - Planning

<u>Purpose</u>: This phase of the SDLC is required to:

- Determine the objective of the new system.
- Assess the technological, economical and operational feasibility.
- Produce a high-level overview document of the proposed project. (It will contain information relating to the project's requirements and will enable the formalization and definition of the project's scope.)
- Identify the user organization and user representative, within that organization, responsible for identifying requirements.
- ➤ Identify the system development team responsible for completing the project. (This may include writing an RFP for additional contract resources.)
- Develop the project schedule.
- Identify required deliverables.
- Identify assumptions, issues and risks.

#### 8.2. Phase 2 - Definition

<u>Purpose:</u> This phase of the SDLC defines exactly what, who, when and how the project is carried out. This phase takes the deliverable from the previous phase (*Project Charter*), expands on the high-level project outline and provides a specific and detailed project definition. This phase is the first activity of the project after obtaining approval and funding.

This phase provides an effective way of communicating the project scope and schedule as well as any risks or constraints related to the project.

## 8.3. Phase 3 - Analysis

<u>Purpose:</u> This phase of the SDLC is required to understand and document the users' needs for the system. This phase documents, in significantly more detail than the *Project Statement*, the scope, business objectives and requirements of the current/proposed system.

The emphasis throughout this phase is on what the system is to do. During the analysis phase, the technical aspects and constraints should be considered, but should not be influenced by implementation characteristics. The technical aspects of the system are addressed in the design phase.

## 8.4. Phase 4 - Design

<u>Purpose:</u> This phase of the SDLC continues from the detailed <u>System Analysis</u> and describes how the proposed system is to be built. The Design phase is specific to the technical environment in which the system is required to operate and the tools to be used in building the system. The results of this phase significantly impact the Build and User Acceptance phases of the system.

#### 8.5. Phase 5 - Build

<u>Purpose:</u> This phase of the SDLC deals with the development, unit testing and integration testing of the system (application) modules, screens and reports. In addition, this phase addresses the preparation and establishment of the technical environment for development, testing and training of user representatives.

This phase is usually carried out in parallel with the development of user procedures and user documentation from the User Acceptance phase. Both activities are required for module testing upon the completion of the Build phase. Coordination of the Build and User Acceptance phases is a key responsibility of the Project Manager.

## 8.6. Phase 6 – User Acceptance

<u>Purpose:</u> During this phase of the SDLC, user acceptance of the developed system is completed from user acceptance testing to a full production system.

## 8.7. Phase 7 – Implementation and Evaluation

<u>Purpose:</u> The objectives of the Implementation and Evaluation phase are:

- To install the system for production use by the user organization;
- To finalize all system documentation;
- To perform all adjustments to the system necessary to perform the original specified tasks; and,
- > To perform a post-development evaluation.

See **Appendix D** for a comprehensive matrix that links ODE IT applications to specific program areas.

See **Appendix E** for a comprehensive matrix that links ODE IT current applications with their current technology architecture.

# 9.0 2001-2003 Budget

		DBI	TIRM	<b>TESA</b>	<u></u>	<b>Data Integrity</b>		TOTAL
ODE Technology Budget								
DBI	\$ 5,052,676	\$ 5,052,676						
TIRM	\$ 3,280,859		\$3,280,859					
TESA	\$ 6,095,983			\$6,095,983				
Data Integrity	\$ 10,500,000				\$	10,500,000		
Total							\$ 2	24,929,518
Remove TESA contingency (SB 5511)	\$ (277,909)			\$ (277,909)			\$	(277,909)
Data Integrity								
to E-Board	\$(10,325,000)				\$	(10,325,000)	\$(1	10,325,000)
The remaining \$175,000 moved to Department Operations (SB 5511 and SB 5514)					\$	175,000	\$	175,000
Professional Services Contracts								
to E-Board	\$ (2,500,000)	\$(1,776,429)	\$ (430,755)	\$ (292,816)			\$	(2,500,000)
(SB 5511)	¢(12.952.000)	¢ 2 276 247	¢2 950 104	¢E E2E 2E9	\$	175 000	¢ 1	1 926 600
Remaining Current Service Level	\$(12,852,909)	Φ 3,270,247	\$2,850,104	\$5,525,258	Φ	175,000	ψı	1,826,609
DAS unschedule 15% of the								
Remaining Current Service Level (SB 5511)		\$ (470,940)	\$ (409,685)	\$ (794,220)	\$	(25,155)	\$	(1,700,000)
Technology Budget Remaining		\$ 2,805,307	\$2,440,419	\$4,731,037	\$	149,845	\$ 1	0,126,609

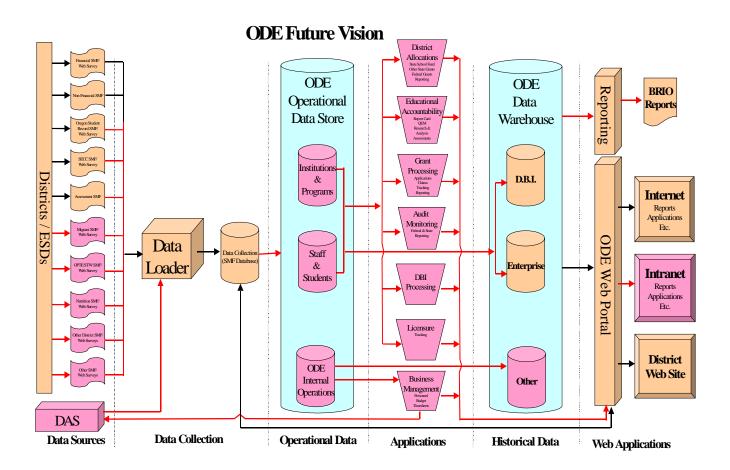
# SECOND ROUND CUTS FROM THE SPECIAL SESSION (Anticipated)

Data Integrity Assurance Incentives	10,325,000
Pre-K study data collection	300,000
project	
Data Base Initiative data	280,000
collection consolidation	
project	
Data Base Initiative	335,000
enhancements	
Technology Enhanced	1,000,000
Assessment program	
Data Base Initiative	585,000
enterprise integration	
TOTAL	12,825,000

## **APPENDIX A**

Technology Vision Diagram

## **Technology Vision Diagram:**



This diagram is discussed in detail on the following pages. The dark gray areas represent existing functionality, while those in light gray represent future functionality.

#### Data Sources

This partition of the ODE Future Vision diagram represents the various data sources coming into ODE from districts. These sources will be in one of two formats, Standard Message Format (SMF) or Web Survey forms. The data sources listed below is not an exhaustive list but includes areas under discussion.

- Financial SMF/Web Survey This data source represents all ODE financial filing requirements associated with educational institutions. Currently the actual and budgeted revenues and expenditures are submitted only via SMF. However, the ESD services provided to districts are collected through a web survey form.
- Non-Financial SMF/Web Survey This data source represents all ODE non-financial filing requirements associated with educational institutions. This data relates to institutions, students, or staff information aggregated to the institution level. This is Data previously collected by the "Fall Report". It is now collected via a Web-based survey or SMF format.
- ➤ Oregon Student Record (OSR) SMF/Web Survey This data source contains student-specific demographic data for ODE. It is planned that ODE would collect unique student records from districts for the purpose of tying students to assessments, migrant, special education and other statuses that are unique to student-level records. This data would be available to other institutions when a student transfers to another institution in Oregon.
- SECC SMF/Web Survey This data source contains Special Education Child Count information. This data is uniquely different than non-financial data. It is confidential, student level information. This data reflects edits that identify and resolve duplicate student submissions. The goal is to link these students to their OSR.
- Assessment SMF/Web Survey This data source represents the submission of student level assessment data to ODE. Currently this data set is handled by multiple entities (ODE, institutions, and a testing contractor). The goal is to have this data set submitted by the sending entity (institution) and received by ODE and to link the students to the OSR.
- Migrant SMF/Web Survey This data source represents the tracking of migrant students throughout Oregon. This survey is currently processed outside of ODE and student data is submitted to ODE after data is cleansed. The goal is to have this data set submitted directly to ODE in a format that will allow linking these students to their OSR.
- ➤ OPTE/School to Work (STW) SMF/Web Survey This data source represents the tracking of OPTE/STW students throughout Oregon. This survey is currently processed within ODE and is submitted to the Enterprise Database after data is cleansed. The goal is to have this data set submitted directly to ODE in a format that will allow linking these students to their OSR.

- Nutrition SMF/Web Survey This data source represents the collection of all nutritional system data that relates to federally funded nutrition programs. Currently this system is implemented utilizing a separate data collection and reporting process from the Data Collection application. The goal is to utilize the data collection components (SMF and Web Survey) that are in place to collect data from districts.
- Other District SMF/Web Surveys This data source represents all other data submissions from institutions not listed above. The goal is that all future data collections will be processed through SMF or Web Survey.
- ➤ Other SMF/Web Surveys This data source represents all data submissions that would come from entities other than institutions and ODE.
- ➤ DAS The Department of Administrative Services (DAS) has a number of legacy applications such as: SFMS, PICS, etc. These applications will provide data to the ODE internal operations database and in turn the new business management applications. The interface with DAS will be identified and implemented in accordance with the integration principals set forth in this strategic plan.

#### Data Loading

This section of the ODE Vision diagram represents all aspects of data collection, validation, and verification by districts.

- Data Loader This component is the process of receiving and handling data from the institutions. This involves validation processes and the management of the submitted files on various directories of the server.
- Data Collection (SMF) Database This component is the storage area for validated and verified data. It also contains database elements supporting SMFs, Web Surveys, code values and security elements. Once data is validated and cleansed it is copied to the ODE Operational Data Store.

#### Operational Data

This part of the ODE Vision diagram is the database that ODE applications will access. This database will be maintained by one or more applications that are discussed in the following section. Each logical grouping (Institutions, Students, Staff, and Financial) are interrelated.

- Institutions and Programs This is data about institutions including ESDs, districts, geographical locations, programs, audited and budgeted revenues and expenditures, grant allocations, fixed asset valuations, phone numbers, addresses, etc.
- Staff and Students This is data about staff and students such as areas of certification, assignments, grades taught, demographic data, grade level,

- special education status, migrant status, assessment scores, demographics, etc.
- ODE Internal Operations This is data related to the operations of ODE such as, revenues, expenditures, personnel information, purchasing, asset management, etc.

## **Applications**

This section of the ODE Vision diagram represents the method in which ODE users will access the Operational Data. Historically, applications have been built around divisions within ODE leading to disparate systems. These systems were supported by redundant databases.

ODE's vision includes a single application that integrates similar data and processes across multiple divisions. This will reduce the amount of redundant databases, lower maintenance costs, and streamline data related activities.

Each proposed application will have access to a subset of the Operational Data. A users' access to specific data elements will be controlled by assigning roles that will be maintained by ODE staff. Security will be held to a minimum in order to reduce the number of intra-agency requests for data.

The following is a list of the most important applications:

- District Allocations The processes that will be used to support the formulas that allocate funds to institutions. Examples of these allocations are the State School Fund and other state and federal grants.
- Educational Accountability The processes to provide educational accountability to legislature and various stakeholders in the Oregon educational community. Example components of this application would include the Report Card, Quality Education Model, and research and analysis.
- Grant Processing The processes to provide and manage various state and federal grants to institutions. Example components of this application would support application for grants, claims for funds, allocation tracking, and reporting.
- Audit Monitoring The processes to monitor and forward comments contained in audits received from institutions in support of federal and state requirements.
- ➤ TBD Additional processes yet to be determined.
- Business Management Processes necessary to support the central administration within ODE such as personnel records, development and monitoring of ODE budgets, payroll processing, etc. This application will act as a front end to the current DAS systems such as SFMS or PICS.

#### Historical Data

This area of the ODE Vision diagram represents the historical data that has been extracted from the Operational Data on a periodic basis.

- ➤ DBI The DBI data store includes data that is aggregated to the school and grade level.
- ➤ Enterprise The Enterprise contains data that is left at the lowest level possible to allow for unique correlations between attributes that are typically unique to persons.
- Other This data encompasses data that may be extracted from the ODE internal operations data store.

#### Web Applications

This section of the ODE Vision diagram represents the web applications providing access to information by institutions, other governmental agencies, the public, and other stakeholders and users of ODE K-12 educational data. It would permit feedback of information to the institutions submitting data.

- ➤ ODE Web Presence The ODE Web Presence displays information from ODE via either the internet or an intranet. This information will be drawn from the Historical Databases. This presence provides various stakeholders access to data via web applications and web reports. This will also serve as the user interface to the various applications used by ODE staff.
- Reporting This is the ability to use reporting tools such as BRIO to perform analysis against the data in the data warehouses.
- ➤ Internet This is the portion of the web site that hosts the public reporting capabilities of ODE.
- Intranet This is the portion of the web site that hosts the reports and applications that are available to stakeholders who have access to the ODE wide area network.

District Validation – This is the portion of the web site that hosts the submission front-end, status tracking and error feedback, and verification processes that allow institutions to review, correct, and resubmit their data.

ODE's vision has taken into account DAS IRMD's plans for a single Oregon State portal for e-commerce and e-business.

#### E-Commerce

ODE does not currently conduct financial transactions over the WEB and does not intend to do so in the future. Since ODE does not have a direct line of

authority over schools and school districts it does not have any "production or management" systems, nor does the Department anticipate any need for such systems. Additionally:

- > ODE has no field offices to support
- > SFMS provides support to all school
- > Given its other responsibilities and the low return on investment, ODE does not now foresee providing additional services to schools.

# **APPENDIX B**

## **ODE IT Initiatives-To-Business Processes Matrix**

TIRM Initiatives for Oregon Department of Education	Administration	Student Services	Special Education	Curriculum, Instruction and Field Services	Professional Technical Education	Assessment and Evaluation
Database Initiative Project-Phase 2	X					
Database Initiative Project-Enhancements	X					
Pre-Kindergarten Study Data Collection	X	X				
Training	X	X	X	X	X	X
Computer Based Training	X	X	X	X	X	X
Network Improvements (S&S)	X	X	X	X	X	X
Management and Support Staff	X	X	X	X	X	X
Help Desk Support and Desktop Enhancements	X	X	X	X	X	X
WEB	X	X	X	X	X	X
Intranet	X	X	X	X	X	X
Access Database Projects	X	х	X	X	X	X
Oregon Student Record	X					
SECC on the Web			X			X
Nutrition System	X					
Enterprise Integration Project-Phase 1	X		X		X	X
Enterprise Integration Database-Phase 2	X		X		X	X
Forms Control and Data Dictionary	X	X	X	X	X	X
Network Support (PSS)	X	X	X	X	X	X
Technology Enhanced Student Assessment (TESSA) & Internal Database Maintenance	X					X

Technology Enhanced Student Assessment (TESA) Rollout	X					X
Desktop Publishing	X	X	X	X	X	X
Operations and Maintenance (S&S)	X	X	X	X	X	X
Auditing, Standards, and Procedures	X					
Report Card	X	X	X	X	X	X
Data Consolidation	X					
Data Integrity Assurance	X					
Special Schools	X					
Finance Database	X					
Off-Grade Assessment Tests						X
Integrated Performance Benchmarking System	X	X	X	X	X	X
Distance Education (SB 622 and E-rate)	X					X
Technology Plan	X	X	X	X	X	X

# **APPENDIX C**

## ODE IT Current Technology- Major Initiatives Matrix

	Network	Platform	Group		Databases	Languages	Web
	Ethernet	W2K	Exchange 2000	SQL 7 Access MDB		VB Asp	IIS 5.x
Database Initiative Project-Phase2	x	X	X	Х		X	x
Database Initiative Project-Enhancements	X			Х		Х	
Pre-Kindergarten Study Data Collection	Х			Х		x	х
Training	X						
Computer Based Training	X						
Network Improvements (S&S)	X	X		x			X
Management and Support Staff							
Help Desk Support & Desktop Enhancements	X	×	X	хх		x x	
WEB	x			х		x x	X
Intranet	X			Х		хх	X
Access Database Projects	X			хх		x x	
Oregon Student Record	X			Х		Х	x
SECC on the WEB	X			Х		x	Х
Nutrition	Х			Х		хх	Х
Enterprise Integration Project-Phase 1	X			х		X	X
Enterprise Integration Database-Phase 2	X			Х		X	X
Forms Control and Data Dictionary	X			Хх			
Network Support (PSS)	X			Х			Х
Technology Enhanced Student Assessment (TESA) and Internal Database Maintenance	x			X		X	x
Technology Enhanced Student Assessment (TESA) Roll-Out	х			Х		Х	х
Desktop Publishing	X						

	Network	Platform	Group		Databases	Languages	Web
	Ethernet	W2K	Exchange 2000	SQL 7	Access MDB	VB Asp	IIS 5.x
Operations and Maintenance (S&S)	X			Х	х	x	Х
Auditing, Standards, and Procedures	X			Х	X	x	Х
Report Card	Х			Х		Х	Х
Data Consolidation	X			Х	x		X
Data Integrity Assurance							
Special Schools	X			X			
Finance Database	Х			Х		X	Х
Off-Grade Assessment Tests	X			X			X
Integrated Performance Benchmarking System							
Distance Education (SB622 and Erate)							
Technology Plan							

## **APPENDIX D**

## ODE IT Major Applications-Supported Programs Matrix

Major TIRM Applications and the Program areas they Support	Administration	Student Services	Special Education	Curriculum, Instruction and Field Services	Professional Technical Education	Assessment and Evaluation
Database Initiative Project-Phase 2	X	X	X	X	X	X
Database Initiative Project-Enhancements	X	X	X	X	X	X
Perfect Tracker	X	X	X	X	X	X
Help Desk Support & Desktop Enhancements Track-It	X	X	X	X	X	X
CIFS School Management				X		
CIFS School Scheduling				X		
CIFS Tracking System				X		
Contact Management	X		X			
Grant Management	X	X	X	X	X	X
ODE Resource Monitoring	X	X	X	X	X	X
ODE SFMS Reporting	X	X	X	X	X	X
Travel Management	X	X	X	X	X	X

Personnel Management	X	X	X	X	X	X
Pupil Transportation		X				
OSE Tracking System			X			
Technical Report	X	X	X	X	X	X
Private Vocational					X	
SECC on the WEB			X			
Nutrition		X				
Enterprise Integration Project			X		X	X
Institution Database	X	X	X	X	X	X
Forms Control and Data Dictionary Access	X	X	X	X	X	X
Migrant Student		X				
Technology Enhanced Student Assessment (TESA) And Internal Database Maintenance						X
Item Databank						X
Student Testing						X
Technology Enhanced Student Assessment (TESA) Rollout						X

### **APPENDIX E**

ODE IT Major Applications-Current Technology Matrix

Application	Network	Platform	Group	Databases	Languages	Web
	Ethernet	W2K	Exchange 2000 Foxpro	SQL 7 Access MDB	VB Asp	IIS 5.x
Database Initiative Project- Phase2	х	X	X	х	x	Х
Database Initiative Project- Enhancements	Х	Х		х	x	
Perfect Tracker	X	X		x x		
Help Desk Support & Desktop Enhancements Track-It	X	Х		P X		
Access Database Projects  CIFS School Mgt  CIFS School Scheduling  CIFS Tracking System  Contact Management  Grant Management  ODE Resource Monitoring  ODE SFMS Reporting  Travel Management  Personnel Management  Pupil Transportation  OSE Tracking System  Technical Report	X			PX	X	
Private Vocational	X	X		X	, , , , , , , , , , , , , , , , , , ,	
SECC on the WEB	X	X		x	x x	X
Nutrition	X	X		X	x x	X
Enterprise Integration Project	X	x		x	X	X
Institution Database	Х	X		х	Х	Х
Forms Control and Data Dictionary Access	x	x		P X		
Migrant Student	Х	X	X	P P		
Technology Enhanced Student Assessment (TESA) and Internal Database Maintenance Item databank - LXR Student Testing	x	x		x	x	X
Technology Enhanced Student Assessment (TESA) Roll-Out	X	X		x	X	X
Oregon Student Record	X	X		X	хх	Х
Report Card	Х	X		х	Х	Х
Finance Database - Planned	X	X		х	X	Х

**p**=Planned

## **APPENDIX F**

### Data Integrity Assurance Project

#### 2001-2003 POLICY OPTION PACKAGE

Data Integrity Assurance

Budget Estimate: \$10,500,000

Office of Technology and Information Resource Management

Department of Education

#### 2001-2003 Budget Development

**Purpose:** 

Upgrade and consolidate school district data systems to reduce costs and provide accurate data to support school accountability and implementation of CIM/CAM/PASS/Diploma.

**Premises:** 

- School districts statewide will realize substantial savings over time if computer services are moved into consolidated service centers.
- The quality of school data systems will improve if ODE establishes a process to certify computer systems to higher standards and provides funding to support system upgrades.
- School districts must upgrade their systems to meet the increasing need for accurate, detailed reporting and school-level accountability.

**Background:** 

Currently, Oregon school districts use 23 different computer service centers and software companies for computer services. Forty-one small school districts use manual systems for recording student data. School districts need guidance and support to plan for, select, implement, and upgrade computer systems. Setting standards for computer service providers and providing financial support to districts will reduce the risk associated with one-third of Oregon's school districts implementing new systems. It also presents an opportunity to move to a smaller number of high quality computer service providers for school districts.

A recent audit conducted by the Secretary of State's Audit Division pointed out the risk associated with the closure of OTIS and the need for school district to obtain better data management tools to improve data quality.

The Information Technology Directors from school districts and ESDs along with the Oregon Department of Education have been working toward more standardized data collection and maintenance of student data for some time. The Data Base Initiative Project has standardized finance data collection and reporting. As part of this effort, certified data centers are proposed as a means to ensure data integrity and data quality of both student information and school finance. The demise of the OTIS system supporting 70 school districts; the need for greater school accountability; and the implementation of CIM/CAM/PASS/Diploma have accelerated the need to convert the concept to reality.

This policy package would reduce costs and improve data system quality through:

- Limiting the number of certified data centers to no more than a number specified by the Certification Committee (with a target number of 12 centers);
- Certifying those school data centers that meet standards established by the Certification Committee.
- Providing incentives to districts to join certified data centers;
- Providing funds to districts currently receiving services from certified data centers to support system upgrades;
- Encouraging large school districts to form consortiums for their data systems.

Providing support for all school districts to develop CIM/CAM/PASS/Diploma systems that will link with the statewide Assessment system.

Fund the implementation of the Oregon Student Record (OSR), a standardized statewide electronic student database.

Fund the operation of the Oregon Access Network of 284 Distance Education sites in high schools throughout the state established in the current biennium.

- 1) Certification Process \$550,000
- 2) Support to school districts for data systems \$6,600,000
- 3) CIM/CAM/PASS-Diploma Systems Support \$2,420,000
- 4) Oregon Student Record Implementation \$600,000
- 5) Oregon Access Network \$330,000

#### Summary

Certification requirements may include:

The focus of this package is on Student Information Systems, and it is based on several assumptions:

The purpose of this concept is to reduce expenditures and improve capacity and quality through reduction in the number of data collection centers by establishing a program to provide incentives to districts to use certified data centers. The concept creates a Certification Committee including ODE, school district, and ESD representatives of equal membership appointed by the Superintendent of Public Instruction that administers the program. The Certification Committee will be subject to the rule making authority of the ODE.

The ability to meet all reporting requirements established by the Certification Committee, including:

- Web-based data transmission;
- Implementation of the Oregon Student Record (OSR);
- A viable CIM/CAM/PASS/Diploma system to record student progress
- The capacity to meet school district internal recordkeeping needs;
- A technology plan for upgrading current systems;
- A long-term financial plan for maintaining stable, high quality systems
- Capacity and willingness to provide high quality services to small districts
- Education Service Districts, private vendors, and large school districts may form consortiums and serve as certified data centers
- This package assumes approximately 200,000 students in districts that would apply to join a certified data center and 350,000 currently served by the existing data centers
- Creation and maintenance of secure and reliable data systems, necessary to communicate with the ODE, is beyond the capability of small to medium districts
- Data centers must plan to serve at least 20,000 students or 12 school districts and be approved and certified by the Certification Committee. The Certification Committee will have waiver authority
- The Certification Committee of ESD, school district, and ODE representatives will determine staffing needs to support the application and initial and ongoing certification process.